

3.6 Science & technology

1

PROS & CONS OF SMARTPHONES

- **Pro:** life-management tool; paperless lifestyle; instant communication + entertainment; cashless payment.
- **Con:** too much reliance on screens; lack of personal communication; decreased attention spans; difficult to keep track of cashless spending

2

THE SCIENCE OF DNA

- **used for:** medical diagnosis; genetic modification; ancestry tracking; forensic science
- **DNA databases:** allows tracing of ancestors & family members → can lead to certainty about one's roots or discovery of family; → risk of rejection
- **DNA in crime-solving:** identifying perpetrators & eliminating innocent people; solving cold cases → risk of privacy violations; racial bias

3

ARTIFICIAL INTELLIGENCE

- wide range of common uses, e.g. in healthcare or around the home
- **Cons:** takes away human jobs; dependency on technology; security risks through data collection; dealing with impersonal machines

4

GENETIC ENGINEERING

- improvements in agriculture with higher yields & pest resistance; nutritional value can be added; longer shelf life for food
Risks: mutations; unnatural additions to ecosystem; farmers become dependent on large companies for seeds
- preventative medicine through genetic testing: disease prevention; personalised medication
- cloning: copies of organisms with beneficial characteristics; also results in less variation → can lead to extinction over time

5

CREATION OF "DESIGNER HUMANS"

- future possibility of choosing e.g. hair or eye colour in a child → "shopping" for a baby
- risks: race of super-humans with discrimination against the disabled; social imbalance; lack of diversity in the human gene pool

IMPORTANT VOCABULARY

ancestors	Vorfahren	hereditary	erblich, vererbbar	to reproduce	sich fortpflanzen
cutting	Steckling	to inherit	erben	stem cell research	Stammzellenforschung
descendants	Nachfahren	mammal	Säugetier	trait	Eigenschaft
extinction	Aussterben	nutritious	nährhaft	weedkiller	Unkrautvernichtungsmittel
forensic medicine	Gerichtsmedizin	pest	Schädling	yield	Ernte
heart valve	Herzklappe	preventative	vorbeugend		